

**IN THE CLAIMS:**

The text of all pending claims is set forth below. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND the claims and ADD new claim 13, in accordance with the following:

1. (currently amended) A method for instruction processing executing on a computer, comprising:
  - a ~~first step of identifying~~ classification of a functional unit which can execute a basic instruction;
  - a ~~second step of determining~~ whether said basic instruction can be assigned to a logical instruction slot through checking a relationship between said classification of said functional unit and said logical instruction slot; and
  - a ~~third step of assigning~~, to an instruction slot, said basic instruction determined to be assignable to said logical instruction slot.
2. (currently amended) The method for instruction processing as claimed in claim 1, wherein said ~~first step identifying~~ is divided into a ~~first sub-step of identifying~~ an instruction category of a basic instruction, and a ~~second sub-step of identifying~~ a classification of a functional unit which can execute said instruction category.
3. (currently amended) The method for instruction processing as claimed in claim 1, further comprising a ~~step, prior to said third step assigning~~, for checking a relationship between said basic instruction that can be assigned to said logical instruction slot and other basic instructions to be assigned to other logical instruction slots.
4. (currently amended) The method for instruction processing as claimed in claim 2, further comprising a ~~step, prior to said third step assigning~~, for checking a relationship between said basic instruction that can be assigned to said logical instruction slot and other basic instructions to be assigned to other logical instruction slots.
5. (currently amended) The method for instruction processing as claimed in claim 3, wherein said ~~second step determining~~ includes a step of identifying said logical instruction slot having a lowest numeral determined to be assignable.
6. (currently amended) The method for instruction processing as claimed in claim 4,

wherein said ~~third step assigning~~ includes a step of identifying said logical instruction slot having a lowest numeral determined to be assignable.

7. (currently amended) The method for instruction processing as claimed in claim 3, wherein ~~said idendifying, determining, checking and assigning all of said steps~~ are repeated for all instruction slots.

8. (currently amended) The method for instruction processing as claimed in claim 4, wherein ~~all of said steps-said idendifying, determining, checking and assigning~~ are repeated for all instruction slots.

9. (currently amended) A computer program executing on a computer and stored on a computer readable medium, comprising:

a ~~first step of~~ identifying a classification of a functional unit which can execute a basic instruction;

a ~~second step of~~ determining whether said basic instruction can be assigned to a logical instruction slot through checking a relationship between said classification of said functional unit and said logical instruction slot: and

a ~~third step of~~ assigning, to an instruction slot, said basic instruction determined to be assignable to said logical instruction slot.

10. (currently amended) A computer program as claimed in claim 9, wherein said ~~first step-identifying~~ is divided into a ~~first sub-step of~~ identifying an instruction category of a basic instruction, and a ~~second sub-step of~~ identifying a classification of a functional unit which can execute said instruction category.

11. (currently amended) The computer program as claimed in claim 9, further comprising a step, prior to ~~said third stepassigning~~, for checking a relationship between said basic instruction than can be assigned to said logical instruction slot and other basic instructions to be assigned to other logical instruction slots.

12. (currently amended) The computer program as claimed in claim 10, further comprising a step, prior to said assigning fourth step, for checking a relationship between said basic instruction that can be assigned to said logical instruction slot and other basic instructions to be assigned to other logical instruction slots.

13. (new) A method for aiding instruction processing, comprising:  
arranging variable-length instructions to be executed in an order; and

Serial No. 10/053,707

verifying an arrangement of the variable-length instructions.